

## CLAIMS

1. A microbial adherence inhibitor for administration to animals to substantially prevent the adherence of targeted colony-forming immunogens in the respiratory tracts of said animals produced by the method of:
  - A. Inoculating female birds, in or about to reach their egg laying age, with a targeted colony-forming immunogen;
  - B. Allowing a period of time sufficient to permit the production in the bird of antibody-containing contents in the bird's eggs to the targeted colony-forming immunogen;
  - C. Harvesting the eggs laid by the birds;
  - D. Separating the antibody-containing contents of said eggs from the shells.
2. The microbial adherence inhibitor according to claim 1 wherein: said colony-forming immunogen is one known to decrease an animal's ability to utilize feed by causing respiratory disease.
3. The microbial adherence inhibitor according to claim 2 wherein: said targeted colony-forming immunogen is from the class of respiratory bacteria including *P. Multicoda*, *M. haemolytica*, *H. somnus*, and *H. suis*.
4. The microbial adherence inhibitor according to claim 2 wherein: said targeted colony-forming immunogen is from the class of respiratory bacteria uncluding *Mycoplasma pleuropneumoniae*, *M. hypopneumoniae*, and *M. bovis*.
5. The method according to claim 1, wherein: the antibody-containing contents is derived from an egg from chicken, turkey, duck, goose, pheasant, emu, pigeon, ostrich, quail or any combination thereof.

6. The microbial adherence inhibitor according to claim 1 wherein: said colony-forming immunogen is one known to cause respiratory illness in humans.
7. The microbial adherence inhibitor of Claim 1 including:
  - mixing the separated antibody-containing contents of said eggs with a carrier material.
8. The microbial adherence inhibitor of Claim 1 including:
  - A. Mixing the separated antibody-containing contents of said eggs; and
  - B. Pasteurizing the mixed separated antibody-containing contents of said eggs to eliminate potential pathogenic microorganisms.
9. The microbial adherence inhibitor of Claim 8 including: Storing the pasteurized mixture of separated antibody-containing contents of said eggs on a carrier material.
10. The microbial adherence inhibitor of Claim 9 wherein: the carrier material from a group of materials including soybean oil, molasses, distilled dried grains and beet pulp.
11. The microbial adherence inhibitor according to claim 1 wherein: said targeted colony-forming immunogen is one known to cause respiratory illness in companion animals.
12. The microbial adherence inhibitor according to claim 1 wherein: said targeted colony-forming immunogen is one known to cause respiratory illness in high value nonfood animals, such as horses, zoological animals, and laboratory animals.
13. The microbial adherence inhibitor according to claim 1 wherein: said targeted colony-forming immunogens are from the class of respiratory viruses including swine influenza (H1N1, H3N2).

14. The microbial adherence inhibitor according to claim 1 wherein: said targeted colony-forming immunogens are from the class of respiratory viruses including bovine respiratory syncytial virus (BRSV), bovine viral diarrhea (BVD), bovine parainfluenza<sub>3</sub> (BPI<sub>3</sub>), and infectious bovine rhinotracheitis (IBR) viruses.
15. A microbial adherence inhibitor for administration to food animals substantially preventing the adherence of targeted colony-forming immunogens in the respiratory tracts of said food animals comprising egg contents incorporating antibody specific to said targeted colony-forming immunogens.
16. The microbial adherence inhibitor according to claim 15 wherein said targeted colony-forming immunogens are known to decrease an animal's ability to utilize feed thus lowering average daily gain.
17. The microbial adherence inhibitor according to claim 15 wherein: said targeted colony-forming immunogens are from the class of respiratory viruses including swine influenza (H1N1, H3N2).
18. The microbial adherence inhibitor according to claim 17 wherein: said targeted colony-forming immunogens are known to cause respiratory complex in humans.
19. The microbial adherence inhibitor according to claim 15 wherein: said targeted colony-forming immunogens are from the class of respiratory viruses including bovine respiratory syncytial virus (BRSV), bovine viral diarrhea (BVD), bovine parainfluenza<sub>3</sub> (BPI<sub>3</sub>), and infectious bovine rhinotracheitis (IBR) viruses.
20. A microbial adherence inhibitor for promoting the growth of food animals by decreasing the respiratory stress caused by the presence of a colony-forming immunogen in the respiratory tracts of said food animals by inhibiting the ability of the colony-

forming immunogen to adhere to the respiratory tracts of food animals to reduce the ability of the colony-forming immunogen to multiply, said colony-forming immunogen PRRS produced by the method of:

A. Inoculating female birds, in or about to reach their egg laying age, with P antigen from PRRS;

B. Allowing a period of time sufficient to permit the production in the bird and eggs laid by the birds of antibody to P antigen from PRRS;

C. Harvesting the eggs laid by the birds;

D. Separating the antibody-containing contents of said eggs from the shells.

21. The microbial adherence inhibitor according to claim 20 wherein the separated antibody-containing contents of said eggs is achieved by mixing with carrier material with the antibody-containing contents of said eggs.

22. The microbial adherence inhibitor according to claim 21 wherein carrier material is from a group of materials including soybean oil, molasses, distilled dried grains and beet pulp.

23. The method according to claim 20, wherein the antibody-containing contents is derived from an egg from chicken, turkey, duck, goose, pheasant, Emu, pigeon, ostrich, quail or any combination thereof.

24. The microbial adherence inhibitor according to claim 20 wherein; said colony-forming immunogen is one known to cause respiratory illness in companion animals.

25. The microbial adherence inhibitor according to claim 20 wherein: said colony-forming immunogen is one known to cause respiratory illness in high value nonfood animals, such as horses, zoological animals, and laboratory animals.

26. A method of decreasing animal respiratory illness by inhibiting the ability of a targeted colony-forming immunogen to adhere to the respiratory tract of an animal to reduce the ability of the immunogen to multiply comprising:

- A. Inoculating female birds, in or about to reach their egg laying age, with a targeted colony-forming immunogen;
- B. Allowing a period Of time sufficient to permit the production in the bird of antibody-containing contents in the bird's eggs to the targeted colony-forming immunogen;
- C. Harvesting the eggs laid by the birds;
- D. Separating the entire contents of said harvested eggs from the egg shells;
- E. Mixing the separated contents of said harvested eggs; and
- F. Administering the mixed separated contents of said harvested egg to said animal whereby the antibody to the targeted colony-forming immunogen inhibits adherence of the targeted colony-forming immunogen in the respiratory tract of the animal.

27. The method of Claim 26 wherein: said targeted colony-forming immunogen is from the class of respiratory bacteria including *mycoplasma pieuropneumoniae*, *M. hypopneumoniae*, and *M. bovis*.

28. The method of claim 26 wherein: said targeted colony-forming immunogen is from the class of respiratory bacteria including *P. multicodea*, *M. haemolytica*, *H. somnus*, and *H. suis*.

29. The microbial adherence inhibitor according to claim 26 wherein: said targeted colony-forming immunogens are from the class of respiratory viruses including bovine

respiratory syncytial virus (BRSV), bovine viral diarrhea (BVD), bovine parainfluenza<sub>3</sub> (BPI<sub>3</sub>), and infectious bovine rhinotracheitis (IBR) viruses.

30. The microbial adherence inhibitor according to claim 26 wherein: said targeted colony-forming immunogens are from the class of respiratory viruses including swine influenza (H1N1, H3N2).

31. The method of claim 26 including:

mixing the mixed separated contents of said harvested eggs with a carrier material.

32. The method of claim 31 including:

pasteurizing the mixture of the separated contents of said harvested eggs to eliminate potential pathogenic microorganisms.

33. The method of claim 32 including:

storing the pasteurized mixture of the separated contents of said harvested eggs on a carrier material.

34. The microbial adherence inhibitor according to claim 26 wherein: the antibody-containing contents of said eggs is administered to the animal by spraying or squirting material with the antibody-containing contents of said eggs to animal feed.

35. The microbial adherence inhibitor according to claim 34 wherein: the material is from a group of materials including whey, molasses, PBS, and soy oil.

36. The method of claim 26 wherein: the antibody containing contents are administered by spraying the environment containing the animals with the antibody containing contents.

37. The method of claim 26 wherein: the antibody containing contents are administered by intra-nasally injecting the animal with the antibody containing contents.

38. The method of Claim 26 wherein: said targeted colony-forming immunogen is from the class of respiratory bacteria including *mycoplasma pieuropneumoniae*, *M. hypopneumoniae*, and *M. bovis*.

39. The method of claim 26 wherein: said targeted colony-forming immunogen is from the class of respiratory bacteria including *P. multocoda*, *M. haemolytica*, *H. somnus*, and *H. suis*.

40. The microbial adherence inhibitor according to claim 26 wherein: said targeted colony-forming immunogens are from the class of respiratory viruses including swine influenza (H1N1, H3N2).

41. The microbial adherence inhibitor according to claim 26 wherein: said targeted colony-forming immunogens are from the class of respiratory viruses including bovine respiratory syncytial virus (BRSV), bovine viral diarrhea (BVD), bovine parainfluenza<sub>3</sub> (BPI<sub>3</sub>), and infectious bovine rhinotracheitis (IBR) viruses.

42. A method of producing a microbial adherence inhibitor for administration to a human to inhibit the adherence of targeted colony-forming immunogen in the respiratory tracts of the human comprising:

A. Inoculating female birds, in or about to reach their egg laying age, with a targeted colony-forming immunogen;

B. Allowing a period of time sufficient to permit the production in the bird of antibody-containing contents in the bird's eggs to the targeted colony-forming immunogen;

- C. Harvesting the eggs laid by the birds;
- D. Separating the entire contents of said harvested eggs from the egg shells; and
- E. Mixing the separated contents of said harvested eggs.

43. The method of Claim 42 wherein: said colony-forming immunogen is one known to cause respiratory illness in humans.

44. The method of Claim 42 wherein: said targeted colony-forming immunogens are from the class of respiratory viruses including swine influenza (H1N1, H3N2).

45. The method of Claim 42 including:

mixing the separated antibody containing contents of said eggs with a carrier material.

46. The method of Claim 42 including:

A. Mixing the separated antibody-containing contents of said eggs; and

B. Pasteurizing the mixed separated antibody-containing contents of said eggs to eliminate potential pathogenic microorganisms.

47. The method of Claim 46 including: Storing the pasteurized mixture of separated antibody-containing contents of said eggs on a carrier material.

48. The method of Claim 47 wherein: the carrier material from a group of materials including soybean oil, molasses, distilled dried grains and beet pulp.